

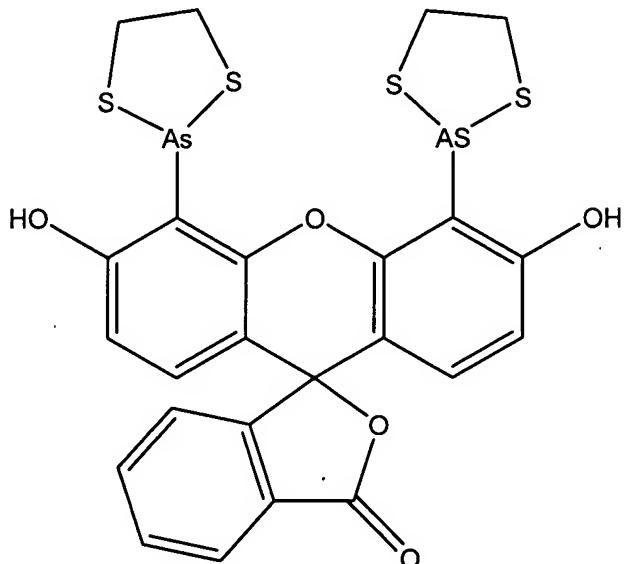
Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claims 1 to 39 (canceled).

Claim 40 (new): A polypeptide comprising a carrier polypeptide, or a fragment thereof, and a target amino acid sequence heterologous to the amino acid sequence of the carrier polypeptide wherein the target amino acid sequence comprises one or more cysteines which specifically react with a biarsenical molecule having the following formula:



Claim 41 (new). The polypeptide of claim 1, wherein a polypeptide domain comprising the target amino acid sequence is covalently attached to the N-terminus of the carrier polypeptide.

Claim 42 (new): The polypeptide of claim 1, wherein a polypeptide domain comprising the target amino acid sequence is covalently attached to the C-terminus of the carrier polypeptide.

Claim 43 (new): The polypeptide of claim 1, wherein the carrier polypeptide is divided into a first portion and a second portion and the target amino acid sequence is located therebetween.

Claim 44 (new): The polypeptide of claim 1, wherein the target amino acid sequence comprises four cysteines in an α -helical domain.

Claim 45 (new): The polypeptide of claim 1, wherein a polypeptide domain comprising the target amino acid sequence comprises an α -helical domain having a cys-cys-X-Y-cys-cys sequence, wherein X and Y are amino acids.

Claim 46 (new): The polypeptide of claim 1, wherein the carrier polypeptide is a receptor, hormone, enzyme, binding protein, or fragment thereof.

Claim 47 (new): The polypeptide of claim 1, wherein the carrier polypeptide is an antibody.

Claim 48 (new): The polypeptide of claim 1, wherein the target sequence is at least 6 amino acids in length.

Claim 49 (new): The polypeptide of claim 1, wherein the target sequence is at least 10 amino acids in length.

Claim 50 (new): The polypeptide of claim 1, wherein further the N-terminal amino acid is acetylated.

Claim 51 (new): The polypeptide of claim 1, wherein the C-terminal amino acid is amidated.

Claim 52 (new): The polypeptide of claim 1, wherein further the N-terminal amino acid is acetylated and the C-terminal amino acid is amidated.

Claim 53 (new): The polypeptide of claim 1, wherein the target sequence comprises the sequence of SEQ ID NO:1.